



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,251	03/10/2004	Carl R. Vanderschuit	9053-000070US	5370
28997	7590	08/09/2005	EXAMINER	
HARNESS, DICKEY, & PIERCE, P.L.C			DUNWIDDIE, MEGHAN K	
7700 BONHOMME, STE 400			ART UNIT	
ST. LOUIS, MO 63105			PAPER NUMBER	
			2875	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/797,251	Applicant(s) VANDERSCHUIT, CARL R.	
	Examiner Meghan K. Dunwiddie	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-35 is/are allowed.
- 6) ☒ Claim(s) 1-7, 13, 16-19, 22-25, 27, 28, 30, 31, 36-38, 43, 44 and 46 is/are rejected.
- 7) ☒ Claim(s) 8-12, 14, 15, 20, 21, 26, 29, 32, 39-42 and 45 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/06/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

This Office Action is a Non-Final Rejection in response to the application filed March 11, 2003 by **Vanderschuit**.

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on May 6, 2004 is in compliance with the provisions of 37 CFR 1.97, accordingly, has been considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 19, 23, 25, 36-38, and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by **Akman** (US 5119281).

4. In reference to Claim 1, **Akman** shows a balloon apparatus [Figure 4B] comprising:

- A balloon [Figure 2: (1)] having an inflation opening [Figure 2: (3)] that can be closed for keeping the balloon inflated [Figure 2: (7)];
- A light source [Figure 2: (35)] inside the balloon [Figure 2: (1)];

Art Unit: 2875

- Wiring [Figure 4B: (39a and 39b)] connecting a power source [Figure 4B: (43)] to the light source [Figure 4B: (35)];
- And a tube [Figure 4B: (27)] through which the wiring [Figure 4B: (39a and 39b)] extends;
- The tube [Figure 4B: (27)] entirely enclosed in the balloon [Figure 2: (1)].

5. In reference to Claim 2, **Akman** shows:

- The wiring [Figure 4B: (39a and 39b)] extends through the inflation opening [Figure 2: (3)].

6. In reference to Claim 3, **Akman** shows:

- The tube [Figure 4B: (27)] comprises an end [Figure 2: (29)] supporting the light source [Figure 2: (35)].

7. In reference to Claim 4, **Akman** shows:

- The tube [Figure 4B: (27)] comprises an end [Figure 2: (31)] that rests adjacent the closed inflation opening [Figure 2: (3)].

8. In reference to Claim 19, **Akman** shows a balloon apparatus [Figure 4B] comprising:

- A balloon [Figure 2: (1)] having an inflation opening [Figure 2: (3)] that can be closed for keeping the balloon inflated [Figure 2: (7)];

Art Unit: 2875

- A light source [Figure 2: (35)] inside the balloon [Figure 2: (1)];
- Wiring [Figure 2: (39a and 39b)] connecting a power source [Figure 4B: (43)] to the light source [Figure 2: (35)];
- A tube [Figure 4B: (27)] through which the wiring [Figure 2: (39a and 39b)] extends;
- And one of more members configured for show within the balloon [Figure 4B: (35)];
- Wherein the tube [Figure 4B: (27)] supports at least one of the one or more members [Figure 4B: (27)].

9. In reference to Claim 23, **Akman** shows a balloon apparatus [Figure 4B] comprising:

- A balloon [Figure 2: (1)] having an inflation neck [Figure 2: (3)];
- A closure member [Figure 2: (7)] configured to close the neck [Figure 2: (3)] to keep the balloon inflated;
- A light source [Figure 2: (35)] inside the balloon [Figure 2: (1)];
- Wiring [Figure 2: (39a and 39b)] connecting a power source [Figure 4B: (43)] outside the balloon [Figure 2: (1)] to the light source [Figure 2: (35)];
- And a device [Figure 2: (27)] extending through the closed neck [Figure 2: (3)] and supporting at least a portion of the wiring [Figure 2: (39a and 39b)], the device [Figure 2: (27)] being moveable by a user to thereby move the light source [Figure 2: (35)] in the balloon [Figure 2: (1)].

10. In reference to Claim 25, **Akman** shows:

- The device comprises a tube [Figure 2: (27)] through which the wiring extends [Figure 2: (39a and 39b)].

11. As to Claims 36, 37, 38 and 43, they are method claims corresponding to an apparatus Claim 1 and are therefore rejected for the similar reasons set forth in the rejection of Claim 1, above.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 13, 16, 28, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Akman** (US 5119281) in view of **Zingale et al.** (US 6371638).

14. In reference to Claim 13, **Akman** shows:

- The tube [Figure 4B: (27)] is configured to support the light source [Figure 4B: (35)].

15. **Akman** does not show:

- The light source is an optical fiber.

Art Unit: 2875

16. **Zingale** et al. teaches:

- The light source is an optical fiber [See column 7 lines 52-54].

17. It would have been obvious for one of ordinary skill in the art, at the time of the invention to fabricate the balloon apparatus as shown in **Akman** with an optical fiber taught by **Zingale** et al. as the light source to illuminate the balloon for the purpose and advantage of providing an alternate means of illuminating the inflated balloon.

18. Regarding Claims 16 and 28, **Akman** shows:

- A light source [Figure 4B: (35)] and wiring [Figure 4B: (39a and 39b)]

19. **Akman** does not show:

- At least one of the light source and the wiring comprising electroluminescent wire.

20. **Zingale** et al. teaches:

- At least one of the light source and the wiring comprising electroluminescent wire [Figure 6B: (43)].

21. It would have been obvious for one of ordinary skill in the art, at the time of the invention to fabricate the balloon apparatus as shown in **Akman** with the electroluminescent elements taught by **Zingale** et al. as the light source to illuminate the

Art Unit: 2875

balloon for the purpose and advantage of providing an alternate means of illuminating the inflated balloon.

22. Regarding Claims 44, **Akman** shows a balloon apparatus [Figure 1: (2)]

comprising:

- A balloon [Figure 1: (4)] having an inflation opening [Figure 1: (16)]

23. **Akman** does not show:

- And an electroluminescent light source applied to an outside portion of the balloon.

24. **Zingale** et al. teaches:

- And an electroluminescent light source [Figure 6A: (43)] applied to an outside portion of the balloon [See column 6 lines 49-52].

25. It would have been obvious for one of ordinary skill in the art, at the time of the invention to use an electroluminescent light source taught by **Zingale** et al. on the outer surface of the balloon shown in **Akman** for the purpose and advantage of providing an alternate means of illuminating the inflated balloon.

26. Regarding Claim 46, **Akman** shows a balloon apparatus [Figure 4B] comprising:

- A balloon [Figure 2: (1)] having an inflation opening [Figure 2: (3)]

Art Unit: 2875

27. **Akman** does not show:

- An electroluminescent light source applied to an outside portion of the balloon comprising a display member applied to a surface of the balloon, the display member comprising the light source.

28. **Zingale et al.** teaches:

- An electroluminescent light source [Figure 6A: (43)] applied to an outside portion of the balloon [See column 6 lines 50-54] comprising a display member [See column 6 lines 50-54] applied to a surface of the balloon [See column 6 lines 50-54], the display member [See column 6 lines 50-54] comprising the light source [Figure 6A: (43)].

29. It would have been obvious for one of ordinary skill in the art, at the time of the invention to use electroluminescent elements taught by **Zingale et al.** as the light source for the illuminated balloon apparatus shown in **Akman** for the purpose and advantage of providing an alternate and perhaps more effective means of illuminating the balloon.

30. Claims 18, 22, 24, 30, and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over **Akman** (US 5119281) in view of **Key et al.** (US 6523778).

31. Regarding Claims 18, 22, and 30, **Akman** shows:

- A balloon apparatus [Figure 4B].

32. **Akman** does not show:

- A kit for constructing the balloon apparatus.

33. **Key et al.** teaches:

- A kit [Figure 2: (28)] for constructing the balloon apparatus [Figure 1: (10)].

34. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide a kit as taught by **Key et al.** including all of the necessary pieces for assembling the balloon apparatus shown in **Akman** for the purpose and advantage of creating a portable and storable means for the balloon apparatus.

35. Regarding Claim 24, **Akman** shows:

- A balloon apparatus [Figure 4B] with a closure member [Figure 2: (7)].

36. **Akman** does not show:

- The closure member comprising a clip.

37. **Key et al.** teaches:

- The closure member comprising a clip [See column 2 lines 21-22].

38. It would have been obvious for one of ordinary skill in the art, at the time of the invention to use a clip as taught by **Key et al.** as the sealing means for the balloon

apparatus of **Akman** for the purpose and advantage of sealing the balloon after it has been inflated and providing means for keeping the balloon inflated.

39. Regarding Claim 31, **Akman** shows:

- A balloon apparatus [Figure 2: (1)] having an opening through which the balloon is inflatable [Figure 2: (3)];
- A power source [Figure 4B: (43)] connected or connectable to the light source [Figure 4B: (35)] via conductive wiring [Figure 4B: (39a and 39b)];
- And a tube [Figure 4B: (27)] through which the wiring [Figure 4B: (39a and 39b)] is extended or extendable, the tube [Figure 4B: (27)] configured to fit inside the balloon [Figure 4B: (1)] and support the light source [Figure 4B: (1)] when the balloon [Figure 4B: (1)] is inflated and the opening is sealed [Figure 2: (7)].

40. **Akman** does not show:

- A kit for making a balloon apparatus.

41. **Key et al.** teaches:

- A kit [Figure 2: (28)] for making a balloon apparatus [Figure 1: (10)].

42. It would have been obvious for one of ordinary skill in the art, at the time of the invention to provide a kit as taught by **Key et al.** including all of the necessary pieces for

Art Unit: 2875

assembling the balloon apparatus shown in **Akman** for the purpose and advantage of creating a portable and storable means for the balloon apparatus.

43. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Akman** (US 5119281) in view of **Stultz** (US 2002/0145863).

44. Regarding Claim 5, **Akman** shows:

- A light source [Figure 2: (35)] connected via the wiring [Figure 4B: (39a and 39b)] to the power source [Figure 4B: (43)].

45. **Akman** does not show:

- A plurality of light sources.

46. **Stultz** teaches:

- A plurality of light sources [Figure 1: (24, 26, 28, and 30)].

47. It would have been obvious for one of ordinary skill in the art, at the time of the invention to use a plurality of light sources taught by **Stultz** in the balloon apparatus shown in **Akman** for the purpose and advantage of creating a brighter and larger array of light emitted from within the inflated balloon.

48. Regarding Claim 6, **Akman** shows:

- The wiring [Figure 2: (39a and 39b)] attached to the light source [Figure 2: (35)] from an end of the tube [Figure 2: (27)].

49. **Akman** does not show:

- The wiring is configured to separate at least one of the light sources.

50. **Stultz** teaches:

- The wiring [Figure 1: (22)] is configured to separate at least one of the light sources [Figure 1: (24, 26, 28, and 30)].

51. It would have been obvious for one of ordinary skill in the art, at the time of the invention to have the ability to separate the light sources in different directions as taught by **Stultz** in the balloon apparatus shown by **Akman** for the purpose and advantage of creating a large array of light within the inflated balloon.

52. Regarding Claim 7, **Akman** shows:

- The light sources [Figure 2: (35)] are attached to the tube [Figure 2: (27)]

53. **Akman** does not show:

- The light sources are radially arranged relative to the tube end.

54. **Stultz** teaches:

- The light sources [Figure 1: (24, 26, 28, and 30)] are radially arranged relative to the end of the tube [See Figure 1].

55. It would have been obvious for one of ordinary skill in the art, at the time of the invention to radially arrange the light sources as taught by **Stultz** relative to the tube within the inflated balloon apparatus as shown in **Akman** for the purpose and advantage of creating a larger array of light within the inflated balloon.

Allowable Subject Matter

SA 56. Claims ~~17, 27 and~~ 33-35 are allowed.

57. Claims 8-12, 14, 15, 20, 21, 26, 29, 32, 39-42, and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meghan K. Dunwiddie whose telephone number is (571) 272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

Art Unit: 2875

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MKD


Stephen Husar
Primary Examiner